

MARKED-UP VERSION OF THE TWO REPLACEMENT PARAGRAPHS IN THE
SUMMARY OF THE INVENTION:

According to one aspect of the invention, bindings that would normally be fastened to the snowboard are instead both fastened to a binding support platform. A platform retention assembly is fastened to the snowboard. The platform retention assembly includes preloaded compliant members that form interfaces with contours on the binding support platform. The interfaces prevent the binding support platform from separating from the platform retention assembly except when a force or torque applied to the snowboard exceeds a set threshold (i.e. except under crash conditions). The platform retention assembly includes firm members, surfaces, or edges that contact firm mating members, surfaces, or edges on the binding support platform to prevent pure translation of the binding support platform relative to the platform retention assembly in the plane of the snowboard. The firm members, surfaces, or edges, and the firm mating members, surfaces, or edges are arranged such that [the locations of contact between them, when projected onto the plane of the snowboard, lie on a single circle] the contacts between them, when projected onto the plane of the snowboard, are all tangent about one mutual center point.

According to another aspect of the invention, a platform retention plate is fastened to the snowboard. The binding support platform is part of a binding support platform assembly that includes preloaded compliant members that form interfaces with contours on the platform retention plate. The interfaces prevent the binding support platform assembly from separating from the platform retention plate except when a force or torque applied to the snowboard exceeds a set threshold (i.e. except under crash conditions). The platform retention plate includes firm members, surfaces, or edges that contact firm mating members, surfaces, or edges on the binding support platform assembly to prevent pure translation of the binding support platform assembly relative to the platform retention plate in the plane of the snowboard. The firm members, surfaces, or edges, and the firm mating members, surfaces, or edges are arranged such that [the locations of contact between them, when projected onto the plane of the snowboard, lie on a single circle] the contacts between them, when projected onto the plane of the snowboard, are all tangent about one mutual center point.

MARKED-UP VERSION OF THE TWO REPLACEMENT PARAGRAPHS IN THE
DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS
OF THE INVENTION:

In the preferred embodiment of **FIG. 6**, raised ribs **36 - 39** rise in the **Z** direction from the surface of plate **21**. Ribs **36 - 39** can be separate parts attached to plate **21** by standard fasteners such as machine screws inserted from the back of plate **21**, by welding, or by a strong adhesive in the case where ribs **36 - 39** are fitted into recessed groves in plate **21** to increase the shear strength of the bond. Alternatively, plate **21** can be molded or formed to include ribs **36 - 39** as a single part. Since ribs **36 - 39** of the preferred embodiment of **FIG. 6** are curved, if the ribs are to be manufactured by press forming then holes may be required in plate **21** to prevent warping and other distortion of the plate. The outside edges of ribs **36 - 39** contact the inside edges of region **13** of binding support platform **10**, preventing "pure" lateral and longitudinal motion of binding support platform **10** in the **X - Y** plane relative to plate **21**. What is meant by "pure" lateral and longitudinal motion of binding support platform **10** in the **X - Y** plane, is lateral or longitudinal motion relative to plate **21** occurring without separation of binding support platform **10** away from plate **21** in the **Z** direction. The ribs **36 - 39** do not, by themselves, prevent motion of binding support platform **10** relative to plate **21** in the **Z** direction. In the preferred embodiment shown in **FIG. 6**, ribs **36 - 39** are curved and arranged in a single circle in the **X - Y** plane so that they do not, by themselves, prevent rotation of binding support platform **10** relative to plate **21** about the **Z** axis. The ribs **36 - 39** are also given some vertical curvature in the outer surface of their cross-sectional aspect so that they do not, by themselves, prevent rotation of binding support platform **10** relative to plate **21** about the **X** axis or **Y** axis (as would occur if binding support platform **10** separated from plate **21** as a result of a torque about the **X** axis or **Y** axis). In another preferred embodiment, ribs **36 - 39** are replaced by discrete pegs rising from the surface of plate **21** and having outside edges that are arranged [in a single circle] to be tangent about one mutual center point in the **X - Y** plane.

In the preferred embodiment of **FIGS. 11-14**, binding support platform **71** includes downwardly protruding ribs **84 - 87** that are part of or are fastened to the underside of region **13** of binding support platform **71**. Downwardly protruding ribs **84 - 87** contact the inner edges **82**

and 83 of underlying plates 72 and 73, and thereby prevent binding support platform 71 from translating purely in the X - Y plane relative to the snowboard. Inner edges 82 and 83 of underlying plates 72 and 73 are curved and arranged [to lie on a single circle so that contact with downwardly protruding ribs 84 - 87 does not, by itself,] so that contacts with downwardly protruding ribs 84 - 87 are all tangent about one mutual center point and so do not, by themselves, prevent rotation of binding support platform 71 about the Z axis relative to the snowboard.

MARKED-UP VERSION OF THE SINGLE REPLACEMENT PARAGRAPH OF THE
ABSTRACT OF THE DISCLOSURE:

A safety release mechanism for snowboards functions with standard contemporary snowboarding boots and bindings. Bindings that would normally be fastened to the snowboard are instead both fastened to a single binding support platform. A platform retention assembly, fastened to the snowboard, includes preloaded compliant members that form interfaces with contours on the binding support platform. The interfaces prevent the binding support platform from separating from the snowboard except when a force or torque applied to the snowboard exceeds a set threshold. The platform retention assembly also includes firm features that contact firm mating features on the binding support platform to prevent translation of the binding support platform relative to the platform retention assembly in the plane of the snowboard. The firm features and the firm mating features are arranged such that [the locations of contact between them, when projected onto the plane of the snowboard, lie on a single circle] the contacts between them, when projected onto the plane of the snowboard, are all tangent about one mutual center point.